

## Title (en)

Hydraulic composite material based on recycled materials and method for production thereof

## Title (de)

Hydraulischer Verbundwerkstoff auf Basis von wiederverwertbaren Materialien und Verfahren zur Herstellung davon

## Title (fr)

MATÉRIAU COMPOSITE HYDRAULIQUE À BASE DES MATÉRIAUX RECYCLÉS ET SON PROCÉDÉ DE PRODUCTION

## Publication

**EP 2949632 A1 20151202 (EN)**

## Application

**EP 14170529 A 20140530**

## Priority

EP 14170529 A 20140530

## Abstract (en)

A process and method for solving the high need for a sustainable materials and good energy economy in the area of buildings and civil infrastructures in a value added and ecological way is described. The solution is a processing method and mix design of a hydraulic composite material, starting from mixed construction or demolition wastes and ending into the hydraulic composite material. The raw materials of this composite material comprise before adding water dominantly (90-100 mass %) recycling materials, which are processed at a concentrated plant. Waste is collected from mixed construction and demolition wastes on site and from selected byproducts of the industry. The share of construction or demolition wastes alone is more than 70 mass-% of the composite material. Harmful constituents are separated from the constituents of the composite in the waste treatment process. The density of the composite varies and can be specified through the mix recipe.

## IPC 8 full level

**C04B 18/16** (2006.01); **B09B 3/00** (2006.01); **C04B 28/08** (2006.01)

## CPC (source: EP US)

**B09B 3/00** (2013.01 - US); **B09B 3/25** (2022.01 - EP US); **C04B 18/04** (2013.01 - US); **C04B 18/14** (2013.01 - US); **C04B 18/16** (2013.01 - EP US); **C04B 28/08** (2013.01 - EP US); **Y02W 30/91** (2015.05 - EP US)

## C-Set (source: EP US)

1. **C04B 28/08** + **C04B 7/02** + **C04B 18/16**
2. **C04B 28/08** + **C04B 12/04** + **C04B 18/16**
3. **C04B 28/08** + **C04B 12/04** + **C04B 18/16** + **C04B 24/18**

## Citation (applicant)

- CN 102989747 A 20130327 - HE DEYU
- JP 2013086091 A 20130513 - YAHATA KK
- US 8308863 B2 20121113 - GLESSNER JR JAMES [US], et al
- US 2012276310 A1 20121101 - ANDERSEN PER JUST [US], et al

## Citation (search report)

- [X] EP 2647610 A2 20131009 - NICHIIHA KK [JP]
- [X] WO 0234691 A1 20020502 - PESCALE S P A [IT], et al
- [A] US 2010242803 A1 20100930 - GLESSNER JR JAMES [US], et al
- [A] US 2010058957 A1 20100311 - BOXLEY CHETT [US]

## Cited by

ES2657076A1; CN110681310A

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

**EP 2949632 A1 20151202**; **EP 2949632 B1 20200311**; CA 2953871 A1 20151203; CN 106660874 A 20170510; US 2017190621 A1 20170706; WO 2015181448 A1 20151203

## DOCDB simple family (application)

**EP 14170529 A 20140530**; CA 2953871 A 20150528; CN 201580033660 A 20150528; FI 2015050370 W 20150528; US 201515314955 A 20150528